

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89 - 054

WASTE DISCHARGE REQUIREMENTS FOR:

WINE COUNTRY INN,
FREEMARK ABBEY WINERY, AND
MARKHAM WINERY,
IN NAPA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. The Markham Winery, Freemark Abbey Winery and Wine Country Inn (hereinafter collectively called the Dischargers), collectively use a wastewater pond system located on the Markham Winery property at 2812 St. Helena Highway, about one mile north of the City of St. Helena, for treatment and disposal of combined winery process and domestic wastewater. The system consists of two ponds, both of which are currently operated as terminal evaporation ponds. This wastewater system is currently governed by waste discharge requirements prescribed in Order No. 81-34, adopted by the Board on June 17, 1981.
2. The Markham Winery, on behalf of the dischargers, submitted a technical report dated December 5, 1988 regarding proposed modifications of the collectively used wastewater facilities, and a Report of Waste Discharge dated December 6, 1988 for the issuance of revised waste discharge requirements.
3. The existing pond system can provide adequate treatment of the combined wastewaters, but has a limited capacity for disposal of the wastewater and net rainfall/evaporation inputs under design conditions, strictly through evaporation. In order to augment the disposal capacity of the wastewater system, the dischargers have proposed to dispose of treated, disinfected effluent from the ponds through drip irrigation of adjacent vineyards.
4. The Wine Country Inn is a 25-unit bed and breakfast facility located at 1152 Lodi Lane, St. Helena, about one half mile north of the Markham Winery facility. Domestic wastewater is settled in septic tanks, collected in a sump and then flows by gravity, or with booster pumping to the Markham ponds via an underground sewer line which is used jointly with the Freemark Abbey Winery.

The main Inn building is served by two 1200 gallon septic tanks in series, and two smaller buildings are each served by separate 1200 gallon tanks. An existing subsurface evapotranspiration system, which will remain in use, is used

intermittently for disposal of flows from one or both of the smaller buildings. This system has a limited capacity and is used only during the dry weather season, and dependent on observed ground water levels in the disposal field. A Use Permit has been approved for two additional units which may be constructed in the near future, but the total flows from the Inn are not expected to increase above the design wastewater generation rate indicated below.

5. The Freemark Abbey Winery is located at 3022 St. Helena Highway, north of Lodi Lane, adjacent to the Wine Country Inn property. The Freemark Abbey Winery complex includes facilities for wine production (crushing, fermentation, aging, bottling and storage), wine tasting and retail sales, two restaurants, a candle factory and gift shop, and rented office space. The winery crushes 400 to 500 tons of grapes per year for production of up to about 80,000 gallons of wine per year. Combined domestic and winery wastewater is settled in two 10,000 gallon septic tanks operated in series, then flows by gravity to the Markham ponds via the sewer line used also by Wine Country Inn.
6. The Markham Winery includes wine production (crushing, fermentation, aging, bottling and storage), wine tasting and retail sales facilities. The winery has a permitted ultimate capacity of 2000 tons of grapes per year, for production of about 300,000 gallons of wine per year. Domestic wastewater is currently handled by a 1200 gallon septic tank and on-site leachfield system. The leachfield system will be abandoned and domestic wastewater will be discharged to the ponds, along with the winery wastewater. The Markham Winery is currently in the process of upgrading its wine production facilities, but the production capacity will not be changed.
7. The projected annual wastewater generation rates for the Dischargers' facilities described above are tabulated below (in million gallons per year):

	Domestic	Winery	Design Total
Wine Country Inn	0.675	--	0.675
Freemark Abbey Winery	2.00	0.50	2.50
Markham Winery	0.33	1.92 *	2.25
	-----	-----	-----
Total	3.005	2.42	5.425

* (at permitted ultimate capacity)

8. Collected wastewater from the above facilities is discharged into the smaller of the two Markham Winery ponds, which is equipped with two mechanical aerators, and then flows into the larger pond. The ponds each have a total depth of about twelve feet. With two feet of freeboard, the smaller pond has a surface area of 1.2 acres and storage volume of 3.13 million gallons, and the larger pond has about 2.7 acres surface area

and storage volume of 7.35 million gallons. The ponds will not be significantly modified, although the aerators in the smaller pond will be upgraded and aerators may be added to the larger pond in the future if necessary to maintain adequate dissolved oxygen levels.

9. Pond effluent will be pumped through a pressure sand filter or equivalent filtration system prior to disinfection by chlorination. Filtered, disinfected effluent will be metered and disposed of to a 7.56 acre parcel of existing vineyards by use of a drip irrigation system. The drip irrigation vineyard area is located adjacent and to the north of the wastewater ponds, on property owned by the Freemark Abbey Winery. The vineyards are surrounded on the east, north and west by other vineyards, and on the south by the Markham ponds and a presently unused pond owned by the Christian Brothers facility. The drip irrigation area will be appropriately fenced to restrict public access and bermed to prevent off-site runoff of reclaimed water. A map showing the locations of the existing facilities and the proposed drip irrigations area is included as Attachment A of this Order.
10. Effluent will be applied to the vineyards at rates of about 4 to 6 inches per month during the growing season, and no more than 2.4 inches per month during the dormant season (November through February). Irrigation of the vineyards will be suspended at least 30 days prior to and during harvest, in order to prevent contact with reclaimed water during harvest.
11. A water balance analysis of the treatment pond and drip irrigation system indicates that, with proper operation and management, the system will have adequate capacity to handle the design wastewater flows described in Finding 7 above, and direct precipitation of a 10-year recurrence interval rainfall record.
12. The Dischargers developed an easement agreement, dated November 30, 1980, with Markham Winery as Grantor and Freemark Abbey Winery and Wine Country Inn, both limited partnerships, as Grantees. The Dischargers are also party to a joint powers agreement, dated December 1, 1980, which designates Freemark Abbey Winery as responsible for the ongoing operation and maintenance of the wastewater collection and treatment pond system. A new agreement for operation and maintenance of the collectively used wastewater facilities, which is expected to be similar to the existing agreement, is currently being developed.
13. A residence which is served by a domestic water supply well is located among the vineyards to the north of the drip irrigation field. A minimum setback distance of 100 feet will be maintained between the drip irrigation field and the domestic water well.

14. A 12-inch diameter water main, which is buried at least three feet below the ground surface, traverses the eastern portion of the drip irrigation area, in a north-south direction. This pipe transports potable water to the City of Calistoga. A minimum setback distance of 20 feet will be maintained between areas irrigated with reclaimed water and the line of this water supply main.
15. Solid waste produced at the Freemark Abbey Winery and the Markham Winery from wine production operations, consisting primarily of pomace, seeds and stems, will be spread and disked into the soils on approximately 10.5 acres of vineyard owned by Freemark Abbey Winery. These solid wastes would be produced at an estimated rate of about 325 tons (about 320 cubic yards) per year, at the wineries' permitted ultimate capacity. Septic and settling tank solids will be pumped out by a licensed septic tank service and hauled away for disposal at an authorized site.
16. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986. The Basin plan contains a listing of beneficial uses of the Napa River and groundwaters in the Napa Valley area.
17. The beneficial uses of the Napa River downstream from the vicinity of the Dischargers' wastewater system, as set forth in the Basin Plan, include:
 - a. Navigation
 - b. Water Contact Recreation
 - c. Non-Contact Water Recreation
 - d. Warm Fresh Water Habitat
 - e. Cold Fresh Water Habitat
 - f. Wildlife Habitat
 - g. Preservation of Rare and Endangered Species
 - h. Fish Migration and Spawning
 - i. Municipal and Domestic Supply
 - j. Agricultural Supply
18. The beneficial uses of groundwaters in the Napa Valley area, as set forth in the Basin Plan, include:
 - a. Municipal Supply
 - b. Industrial Process Water Supply
 - c. Industrial Service Supply
 - d. Agricultural Supply.
19. On March 8, 1989 the Napa County Planning Commission approved a determination that the proposed project to modify and improve the performance of the existing wastewater system is categorically exempt from the California Environmental Quality Act, pursuant to Section 15302 of the California Code of Regulations (Class 2 Categorical Exemption - Replacement or Reconstruction of existing facilities).

20. The Board has notified the Dischargers and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit written views and recommendations.
21. The Board, in a public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the Dischargers, pursuant to the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. Wastewater discharged to the treatment ponds shall not exceed the total annual design flows described in Finding 7 of this Order.
2. No wastewater shall be applied to the drip irrigation area when soils are saturated, when conditions are such that runoff or ponding is likely to occur, during rainfall, or when rainfall is expected to occur within 24 hours.
3. Neither the treatment nor the disposal of wastes shall create a nuisance or pollution as defined in the California Water Code.
4. There shall be no bypass or overflow of waste to waters of the State from the Dischargers' wastewater collection, treatment, storage or disposal facilities.
5. Discharge of toxic substances into the ponds which will disturb the normal biological treatment mechanisms of the ponds is prohibited.
6. The discharge of waste shall not degrade the quality of any groundwater used for domestic purposes or cause an increase in any quality parameter that would make groundwater unsuitable for irrigation use.
7. No reclaimed water shall be allowed to escape from the designated use area via surface flow.
8. Reclaimed water shall not be used as a domestic or animal water supply. There shall be no cross-connection between potable water supply and piping containing reclaimed water. Supplementing reclaimed water with water used for domestic supply shall not be allowed except through an air-gap separation.

9. Reclaimed water shall not be discharged onto any facility or area not designated for reclamation such as walkways, passing vehicles, buildings, domestic water facilities or food handling facilities. Drinking water facilities shall be protected from reclaimed water contact.
10. Wastewater shall not be discharged to the Wine Country Inn's existing subsurface evapotranspiration system during the wet weather period of November 1 through March 31, or when saturated soil conditions persist.
11. Discharge to the Wine Country Inn's subsurface system resulting in surfaced effluent is prohibited.

B. Discharge Specifications

General

1. All wastewater streams discharging into the ponds shall be measured in order to monitor the total flow rate of wastewater discharged into the ponds.
2. The use of reclaimed water shall be limited to drip irrigation of the vineyard area described in Finding 9 and as shown on Attachment A of this Order, unless written authorization is obtained from this Board's Executive Officer.
3. The wastewater ponds, and areas irrigated with reclaimed water which are generally accessible to the public, shall be adequately fenced to restrict public access.
4. Conspicuous warning signs shall be posted around the ponds and the irrigation field informing the public that the water contained therein is reclaimed water which is not safe for drinking or contact. Signs shall be of sufficient size and proper wording to be clearly read. The signs shall be posted at the corners and midpoints of the pond and irrigation field perimeters.

Treatment/Storage Ponds

5. Water at the surface of the ponds shall meet the following quality limits at all times:

In any grab sample:

- | | |
|----------------------|--------------------------------|
| a. Dissolved Oxygen | 2.0 mg/l, minimum |
| b. Dissolved Sulfide | 0.1 mg/l, maximum |
| c. pH | 6.0, minimum;
9.0, maximum. |

6. To prevent the threat of overflows, a minimum freeboard of two (2) feet shall be maintained in the ponds at all times.
7. The ponds shall be adequately protected from erosion, washout, and flooding from a rainfall event having a predicted frequency of once in 100 years.

Reclaimed Water System

8. Drip irrigation system emitters must be installed close to the ground and in such a manner to minimize the possibility that fruit will be sprayed with reclaimed water, if the emitters become plugged, broken or accidentally removed. The drip irrigation lines must be periodically inspected to ensure compliance with this provision.
9. A setback distance of at least 100 feet shall be maintained at all times between the drip irrigation area and any domestic water supply well.
10. A setback distance of at least 20 feet shall be maintained at all times between areas irrigated with reclaimed water and the line of the potable water supply main located within the proposed drip irrigation area.
11. There shall be at least a 10 foot horizontal and a one foot vertical separation between all major pipelines transporting reclaimed water and pipelines transporting domestic water, with the domestic water pipelines above the reclaimed water pipelines.
12. The downslope perimeters of the drip irrigation area shall be bermed or equipped with a tail-water collection system to prevent off-site runoff of reclaimed water.

Reclaimed Water Use

13. The Dischargers shall assure that reclaimed water disposed to the drip irrigation field is at all times an adequately oxidized, filtered, disinfected wastewater that meets the following quality limits at all times:

In any grab sample:

- | | |
|---|--------------------|
| a. Five-day Biochemical
Oxidation Demand | 40.0 mg/l, maximum |
| b. Dissolved Oxygen | 1.0 mg/l, minimum |
| c. Dissolved Sulfides | 0.1 mg/l, maximum |

At any point downstream of the disinfection facilities where adequate contact with the disinfectant is assured:

- d. The median number of Total Coliform organisms shall not exceed 23 MPN/100 ml as determined from the results of the last seven days for which analyses have been completed. The number of Total Coliform organisms shall not exceed 240 MPN/100 ml in any two consecutive samples.
14. The Dischargers shall discontinue the pumping of reclaimed water to the irrigation field during any period when there is reason to believe that the limits contained in Specification B.13., above, are not being met. The pumping of reclaimed water shall not be resumed until all conditions which caused the limits specified in B.13. to be violated have been corrected.
15. The Discharger shall manage its drip irrigation system so as to minimize wastewater ponding which could cause a mosquito breeding problem.
16. Any grapes which come into contact with reclaimed water shall be removed from the harvestable crop which is used for wine production.
17. Irrigation of the vineyards shall be suspended at least thirty (30) days prior to harvesting, in order to allow the soils to dry before harvesting and to prevent harvest workers from directly contacting reclaimed water.

C. Provisions

1. The Dischargers shall comply with all sections of this Order immediately upon adoption.
2. The Dischargers shall comply with the Self-Monitoring Program as adopted by the Board and as may be amended by the Executive Officer.
3. The Dischargers shall submit to the Board as-built plans of the completed wastewater pond and drip irrigation system, and a copy of the Dischargers' revised agreement(s) regarding operation and maintenance of the wastewater facilities, prior to initiating use of the system.
4. The waste discharge requirements prescribed by this Order supercede those prescribed by the Board's Order No. 81-34. Order No. 81-34 is hereby rescinded.
5. The Dischargers shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed, or as modified, to achieve compliance with this Order.

6. All equipment, including pumps, piping, valves, storage ponds etc. which may at any time contain reclaimed water shall be adequately and clearly identified with warning signs and the Dischargers shall make all necessary provisions, in addition, to inform the public that the liquid contained is reclaimed water and is unfit for human consumption.
7. In reviewing compliance with Prohibition A.4. and Discharge Specification B.6. of this Order, the Board will take special note of the difficulties encountered in achieving compliance during entire wet seasons having a rainfall recurrence interval of greater than once in ten years.
8. In the event the Dischargers are unable to comply with any of the conditions of this Order due to:
 - a. Breakdown of wastewater transport or treatment equipment;
 - b. Accidents caused by human error or negligence; or
 - c. Other causes such as acts of nature,

the Dischargers shall notify the Board by telephone as soon as the Dischargers or the Dischargers' agent(s) have knowledge of the incident. Written confirmation of this notification shall be submitted within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

9. The Dischargers shall permit the Board or its authorized representatives, in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Access to and copy of, at reasonable times, any records that must be kept under the conditions of this Order;
 - c. Inspection, at reasonable times, of any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; or
 - d. To photograph, sample or monitor, at reasonable times, for the purpose of assuring compliance with this Order.

10. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Dischargers, the Dischargers shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.
11. The Dischargers shall file with the Board a Report of Waste Discharge at least 180 days before making any material change in the character, location, or volume of the reuse, except for emergency conditions in which case the Board shall be notified.
12. The Board will review this Order periodically and may revise the requirements when necessary.
13. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - a. Violation of any term or condition contained in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts;
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized reuse; or
 - d. Endangerment to public health or environment that can only be regulated to acceptable levels by Order modification or termination.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 19, 1989.

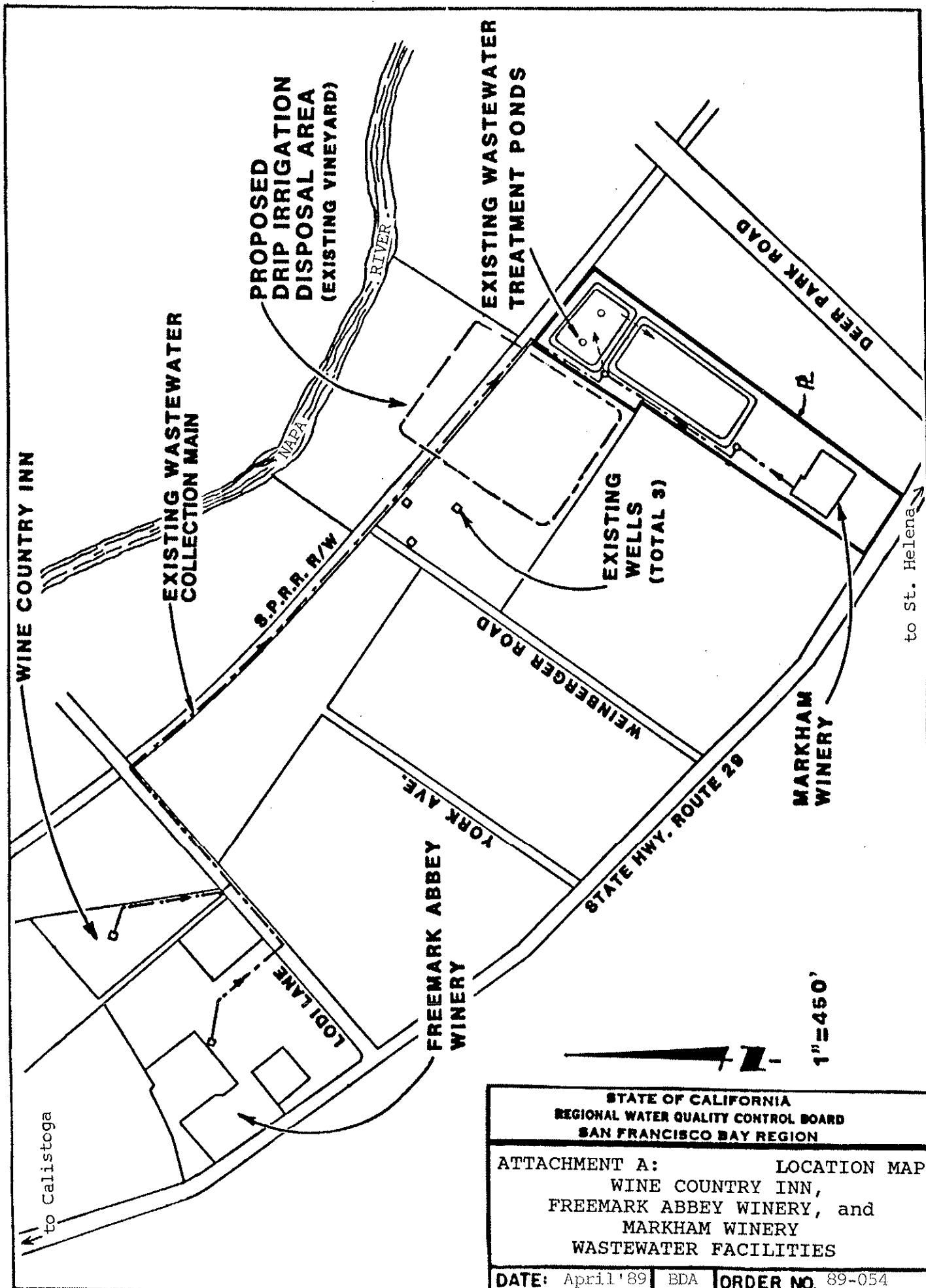


STEVEN R. RITCHIE
Executive Officer

Attachments:

Location Map
Self-Monitoring Program

[File No. 2139.3088]
[Originator/BDA]
[Reviewer/RJC]



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

WINE COUNTRY INN,

FREEMARK ABBEY WINERY, AND

MARKHAM WINERY

IN NAPA COUNTY

ORDER NO. 89 - 054

CONSISTS OF

PART A

PART A

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principle purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board; and
2. To facilitate self-policing by the discharger in the prevention and abatement of pollution arising from waste discharge.

II. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to Code of Federal Regulations Title 40, Section 136 (40 CFR S136), or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS), or a laboratory waived by the Executive Officer from obtaining a DOHS certification for these analyses.

The director of the laboratory whose name appears on the certification, or his/her laboratory supervisor who is directly responsible for the analytical work performed shall supervise all analytical work including appropriate quality assurance/quality control procedures in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

III. DEFINITION OF TERMS

- A. A grab sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples represent only the condition that exists at the time the sample is collected.
- B. A flow sample is defined as the accurate measurement of the flow volume over a given period of time using a properly calibrated and maintained flow measuring device. Flows calculated from properly maintained pump usage records for an accurately calibrated pump are acceptable.

C. Standard Observations

1. Pond Area

- a. For each pond, determine height of the freeboard at the lowest point of the pond perimeter levees.
- b. Evidence of seepage from the ponds (Show affected area on a sketch, and estimate volume or flow rate).
- c. Odor from ponds: If present, indicate apparent source, characterization, direction of travel, and any public use areas or offsite facilities affected by the odors. (*)
- d. Estimated number of waterfowl and other water-associated birds in the pond area.
- e. Warning signs properly posted to inform public that pond contains wastewater which is not safe for drinking or contact.

2. Vineyard Drip Irrigation Site

- a. Evidence of runoff of reclaimed water from the site (Show affected area on a sketch, and estimate volume).
- b. Odor from Irrigation site: If present, indicate apparent source, characterization, direction of travel, and any public use areas or offsite facilities affected by the odors. (*)
- c. Evidence of ponding of reclaimed water, and/or evidence of mosquitoes breeding within the irrigation area due to ponded water.
- d. Warning signs properly posted to inform public that irrigation water is reclaimed water which is not safe for drinking or contact.
- e. Evidence of leaks or breaks in the drip irrigation system pipelines or tubing.
- f. Evidence of plugged, broken or otherwise faulty drip irrigation system emitters.

* Note: Odors are not considered violations when confined within the dischargers' property, and the potential for transmission of odors to public use areas or offsite facilities is minimal.

3. On-site Evapotranspiration System (Wine Country Inn)

Evidence of surfaced effluent resulting from overloading or use when soils are saturated.

IV. DESCRIPTION OF SAMPLING AND OBSERVATION STATIONS

A. POND INFLUENT

<u>Station</u>	<u>Description</u>
A-1	At a point in the Wine Country Inn wastewater collection system at which all waste tributary to the ponds from this facility is present.
A-2	At a point in the Freemark Abbey Winery wastewater collection system at which all waste tributary to the ponds from this facility is present.
A-3	At a point in the Markham Winery wastewater collection system at which all waste tributary to the ponds from this facility is present.

B. POND EFFLUENT

<u>Station</u>	<u>Description</u>
E-1	At a point in the pond effluent prior to being applied to irrigation site (May be same as E-1-D).
E-1-D	At a point in the effluent from the disinfection facilities at which adequate contact with the disinfectant is assured.

C. POND WATERS

<u>Station</u>	<u>Description</u>
P-1 and P-2	At points in Pond 1 (Aeration Pond) and Pond 2 (Larger Pond), respectively, about two feet from the waters edge, representative of the pond water.

D. OBSERVATION STATIONS

<u>Station</u>	<u>Description</u>
L-1 through L-4	Pond Levees - at the midpoints of the perimeter levee around the ponds.
I-1 through I-6	Drip Irrigation Site - at the midpoints of the irrigation site perimeter, and at two points in the middle of the irrigation area.
WCI ETS	Wine Country Inn Evapotranspiration system.

NOTE: A sketch showing the locations of each observation station shall accompany the first monitoring report, and subsequent reports when station locations are changed or a violation is reported.

V. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

- A. The Dischargers are required to perform observations, sampling, measurements and analyses according to the schedule given in Table I (Attachment A).
- B. The Dischargers shall conduct a complete inspection of all drip irrigation lines and emitters at least once each year, during the vineyard's dormant season. A report of the findings of this inspection, including a description of any repairs or modifications made to the drip irrigation system, shall be submitted to the Board by April 15th.

VI. REPORTS TO BE FILED WITH THE REGIONAL BOARD

A. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar quarter (ending March, June, September and December). Reports shall be submitted to this Regional Board's office no later than the fifteenth day of the month following the end of each quarter. The reports shall consist of the following:

1. Letter of Transmittal

A letter transmitting the self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory.

The transmittal letter shall contain a statement by the Discharger, or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

2. Results of Analyses and Observations

- a. Tabulations of the results from all required analyses specified in Table I (Attachment A) by date, time, type of sample, and sample station.
- b. Completed Pond Observation and Reclaimed Water Use Report forms (Attachments B and C), or equivalent reports of all required observations.

B. Report of Permit Violation

In the event the Discharger violates, or threatens to violate the conditions of the waste discharge requirements and prohibitions due to:

- a. Maintenance work, power failure, or breakdown of wastewater transport or treatment equipment;
- b. Accidents caused by human error or negligence; or
- c. Other causes such as acts of nature,

the Discharger shall notify the Regional Board office by telephone as soon as the Discharger or the Discharger's agents have knowledge of the incident. Written confirmation of this notification shall be submitted within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 89-054.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.



STEVEN R. RITCHIE
Executive Officer

Effective Date

4/19/89

Attachments:

- A. Table I - Schedule for Sampling, Measurements and Analyses
- B. Pond Observation Report form
- C. Reclaimed Water Use Report form

[File No. 2139.3088]
[Prepared by BDA]
[Reviewed by RJC]

ATTACHMENT A

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS AND ANALYSES

(WINE COUNTRY INN, FREEMARK ABBEY WINERY, AND MARKHAM WINERY)

SAMPLING STATIONS	All A	E-1 (1)	E-1-D (1)	P-1 & P-2	All L	All I	WCI ETS
Type of Sample --> Parameter	Flow	G	G	G	O	O	O
Total Monthly Flow (gals)	M	M					
pH (units)				M			
Dissolved Oxygen (mg/l)		M		M			
BOD (mg/l)		M					
Dissolved Sulfides (mg/l)		M(2)		M(2)			
Total Coliform (MPN/100ml)			3/W				
Applicable Standard Observations (3)					2W	2W (4)	E

LEGEND FOR TABLE I

Type of Sample

Flow = Flow measurement
G = Grab Sample
O = Observations

Sampling Frequency

M = Monthly
2W = Every two weeks
E = Each event
3/W = Three days per week,
on non-consecutive days

NOTES:

- (1) Measurements and analyses required only when pond effluent is discharged to drip irrigation site.
- (2) Analysis only required when Dissolved Oxygen is below 2.0 mg/l.
- (3) The Discharger shall perform the required observations and file the Pond Observation and Reclaimed Water Use Reports (Attachments B and C, respectively), or equivalent reports, as part of the quarterly Self-Monitoring Reports. Reclaimed Water Use Reports are only required for months when irrigation occurs.
- (4) Observations of drip irrigation site are to be conducted during irrigation operations.

ATTACHMENT B

POND OBSERVATION REPORT

(WINE COUNTRY INN, FREEMARK ABBEY WINERY, AND MARKHAM WINERY)

1. Reporting Period (Month/Year): _____

2. Monthly Flow to Ponds, from indicated facility (gallons):

a. Wine Country Inn (A-1) _____

b. Freemark Abbey Winery (A-2) _____

c. Markham Winery (A-3) _____

d. Total _____

3. Required observations:

(Provide required information, and indicate 'yes' or 'no' where applicable, according to observed conditions.)

Inspection Date and Time:								
Freeboard (feet):								
a) Pond 1 (Aeration Pond)								
b) Pond 2 (Larger Pond)								
Observation Stations:	L-1	L-2	L-3	L-4	L-1	L-2	L-3	L-4
Evidence of seepage from pond								
Nuisance Odors from Pond								
Estimated number of water-fowl in pond area								
Warning Signs Improperly Posted								
Public Contact with Pond Water								

If any of the above yes/no observations were yes, indicating a violation of waste discharge requirements, a written report containing the following information shall be submitted:

- Time when violation was observed.
- Show location of violation on a sketch of the site.
- Explain cause and extent of violation.
- Describe corrective action taken and the dates compliance was achieved and irrigation was resumed.

4. I certify that the information in this report, to the best of my knowledge, is true and correct.

Signature of User Supervisor_____
Date

ATTACHMENT C

RECLAIMED WATER USE REPORT

(WINE COUNTRY INN, FREEMARK ABBEY WINERY, AND MARKHAM WINERY)

1. Reporting Period (Month/Year): _____
2. Circle dates when irrigation occurred: 1 2 3 4 5 6 7 8 9
 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
 26 27 28 29 30 31
3. Total Monthly Flow to irrigation (gallons): _____
4. Required observations: (Provide required information, and indicate 'yes' or 'no' where applicable, according to observed conditions.)

Inspection Date and Time												
Observation Stations:	1	2	3	4	5	6	1	2	3	4	5	6
Escape of Reclaimed Water from Site												
Nuisance Odors from Reclaimed Water												
Ponding of Reclaimed Water												
Mosquito Breeding												
Warning Signs Improperly Posted												
Public Contact with Reclaimed Water												
Drip Lines Leaking												
Drip Emitters Broken Plugged or Faulty												

If any of the above observations were yes, a written report containing the following information shall be submitted:

- Time when violation was observed.
- Show location of violation on a sketch of the site.
- Explain cause and extent of violation.
- Describe corrective action taken and the dates compliance was achieved and irrigation was resumed.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

 Signature of User Supervisor

 Date